

SINGLE V. FULL CONTAINMENT TANKS

1. Please explain Cheniere's decision in 2012 to construct full containment tanks at Corpus Christi instead of single containment tanks. If single containment tanks are appropriate for Sabine Pass, why were they not selected for Corpus Christi?

Both designs are capable of containing the full contents of the storage tank.

An operator's selection of tank design and method of containment is based on multiple considerations, including a facility's physical footprint. Sabine Pass has a larger physical footprint, which accommodates the secondary containment system capable of containing 110% of a tank's capacity. Corpus Christi has a smaller land footprint, where the integrated containment design is more appropriate.

2. Has Cheniere ever considered constructing full containment tanks at Sabine Pass? If so please explain.

See above: both designs are capable of containing the full contents of the storage tank.

3. Experts have said the use of lower-cost single containment tanks contributed to Cheniere's overall cost advantage. The same experts note that full containment tanks have become the industry norm and are much safer than single containment tanks. How would you characterize these two viewpoints as it relates to safety and operations at Sabine Pass?

Cheniere has used both designs after considering the particular location, needs, and characteristics of each facility, and has demonstrated that both tank design options can safely meet our business and operational requirements. Each design complies with all federal and state safety requirements for the design of LNG storage tanks, as well as the industry standard.

4. Cheniere's website says "approximately 85-95 percent of Cheniere's expected aggregate LNG production capacity, either completed or under construction, is contracted through long-term sales and purchase agreements" Can you explain how tank shutdowns at Sabine Pass LNG affect Cheniere's ability to deliver on these long-term supply contracts? Can Sabine Pass meet its commercial obligations on a sustained basis with one tank completely removed from service for intensive repairs? Can Sabine Pass meet its commercial obligations with more than one tank completely removed from service for intensive repairs?

LNG production has not been affected by these two tanks being offline, and Sabine Pass continues to be able to meet our storage requirements with three storage tanks. In consultation with PHMSA, and with repair plans approved by PHMSA, we are moving forward with repairs to bring both tanks back online safely and expeditiously.

5. Cheniere is required to report cold spots, tank cracks, releases of LNG or refrigerants, and other operational issues immediately to PHMSA. Similarly, Cheniere is to report any "geysering"

incidents in bi-annual reports to FERC. Can you please describe and explain Cheniere's compliance with these requirements?

Cheniere is committed to compliance and timely reporting.

SABINE PASS LEAK INVESTIGATION

6. A PHMSA February 2019 document indicates "low temperature excursions" occurred on four out of the five tanks at Sabine Pass from 2009 to 2018 (S-101, S-102, S-103, and S-105), and links the January 2018 LNG and vapor leaks to low temperature events. What is the root cause underlying these "low-temperature excursions"? What steps has Cheniere taken to stop the leaks and low-temperature events? What steps has Cheniere taken to address the underlying cause? When will Cheniere fully resolve the issue?

The Root Cause Failure analysis, conducted by an independent third-party, confirmed Cheniere's initial assessment that the use of the bottom fill valve was the direct cause of the January 2018 event. Bottom fill valves have been mechanically and electronically disabled in all tanks at Sabine Pass, alarm systems have been improved, and all remaining administrative recommendations have been implemented. Cheniere now is focused on working with PHMSA to safely return Tank 1 and Tank 3 to operational service.

7. PHMSA notes Cheniere has been aware of temperature excursions on Sabine Pass tanks dating back to 2008 and hired tank contractor Matrix to study the issue in 2017. Can you explain Cheniere's decision to not fully inform PHMSA of the ongoing issues, or provide a copy of the Matrix report to authorities before the 2018 incident?

In 2017, Cheniere retained Matrix to assess temperature excursions experienced on Tank S-103. By retaining an expert in tank construction, the Company demonstrated its commitment to understanding the issues and responding appropriately.

8. Please describe how the design for tanks 101-103 differs from that used in tanks 104-105. Why was a different contractor selected for construction of tanks 104-105?

Tank design details and contractor selection are confidential business matters, and therefore cannot be disclosed publicly.

9. Do tanks 104-105 have a bottom fill line, and if so, has it been made inoperable, or are there plans to make it so? Do you agree with PHMSA's assessment that the cold temperature problems with tank 105 stem from the same issues seen on tanks 101-103?

See above: Bottom fill valves have been mechanically and electronically disabled in all tanks even where a tank has no indication of a particular issue.

10. Tank S-103 leaked from April 2018 to July 2018. Can you explain Cheniere's difficulties in stemming this leak? What steps did Cheniere take to ensure worker safety during this period?

The information in this question is incorrect. There was not a four month leak. Tank S-103 was stabilized and removed from service immediately following the January 22, 2018 event. Once PHMSA approved a work plan for Tank S-103, Cheniere began implementing a repair process.

11. In September 2018, PHMSA rejected Cheniere's work plan for tank repairs at Sabine Pass, calling it "insufficient." PHMSA said: "Cheniere is proposing to put Tank S-101 back into service without inspecting the damage, and then living with the uncertainty risk for the next 30 to 50+ years...Cheniere's proposed solution does not adequately address the risks associated with the decision to not fully investigate the damage caused by the LNG spill." Could you comment on PHMSA's characterization?

Cheniere and independent third party experts developed a repair plan in accordance with recognized industry standards for Tank S-101 that would have allowed the tank to return to safe operational service in the fall of 2018. Cheniere is committed to safe operations and disagrees with PHMSA's categorization that the proposed repair would have resulted in "risk for the next 30-50+ years." That repair was developed and vetted by different independent third party consultants. That being said, PHMSA disagreed with that approach and, due to timing considerations, Cheniere made a business decision to forego any further delay and submit a revised work plan for Tank S-101. We have worked with PHMSA and now have PHMSA-approved repair plans for both tanks.

12. PHMSA's Julie Halliday said during the 2018 public hearing that a pool fire could result from leaks at Sabine Pass. She said such a fire could burn for "days, months," and "there is really no way to put [it] out." Is this accurate?

No.

13. Have similar leaks occurred at Cheniere's Corpus Christi terminal? If yes, please elaborate.

No.

CLIMATE

14. Cheniere's climate and sustainability webpage states, "U.S. LNG has positive climate benefits, but excessive methane leakage can erode this advantage." How does this relate to the ongoing leaks at Sabine Pass?

There are no ongoing leaks at Sabine Pass.

15. What is the total amount of methane emissions associated with tank cracking and associated leaks, from 2008 to the present? If unable to provide a precise accounting of the emissions in either of these categories, please provide a range and explain the cases that the minimum and maximum points on that range represent.

There have not been “tank cracking and associated leaks” documented “since 2008”. This is the only documented incident.

16. What level of annual methane emissions is Sabine Pass LNG permitted for? Are the emissions associated with the tank leaks consistent with those projections?

Sabine Pass is permitted for approximately 10 million tons of CO₂ per year. The emissions from this event are not material. The release of LNG was approximately 39 cubic meters, or approximately 0.0109% of our permitted emissions for the year.

17. How do the cracking-related tank leaks affect Cheniere’s overall climate emissions footprint?

The emissions related to the tank event are very small. For example, the seepage in Tank S-101 had to be measured with highly-sensitive equipment that detects in parts-per million.

TRANSPARENCY

18. Cheniere argued against the disclosure of virtually all documents relating to the leak incident and subsequent settlement. Can you briefly summarize Cheniere’s justification against public disclosure of these records and how it comports with the company’s promises to be transparent? Please explain Cheniere’s reason for threatening to sue PHMSA regarding the disclosure of these records.

Cheniere’s commitment to transparency recognizes both the public’s interest in relevant information and the importance of protecting the confidential business details of the company, our suppliers, and our licensors.